

L Number	Hits	Search Text	DB	Time stamp
-	449	xanthene and (rose adj bengal)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/31 16:16
-	70	((xanthene and (rose adj bengal))) and (cancer or chemotherapy or tumor)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/31 15:00
-	28	((xanthene and (rose adj bengal))) and (cancer or chemotherapy or tumor)) and (concentration) and (delivery or deliver)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/31 15:06
-	28	((xanthene and (rose adj bengal))) and (cancer or chemotherapy or tumor)) and (concentration) and (delivery or deliver)) and (aqueous or suspension or solution or cream or ointment or gel or syrup or suppositor? or tablet or capsule or spray)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/31 15:07
-	9	("9703697").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/31 16:24
-	2	("6036941").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/31 16:24

ANSWER 7 OF 7 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 1997-132381 [12] WPIDS
DOC. NO. CPI: C1997-042719

TITLE: Fluorogenic substrates for diagnosis and photo-dynamic therapy of tumours - contain masking gps. removable by cell enzymes, partic. those in tumour, give higher ratio of active cpd. in tumour-healthy cells.

DERWENT CLASS: B02 B04 D16 J04
INVENTOR(S): BAGLIONI, P; BOTTIROLI, G; CROCE, A C; MONICI, M
PATENT ASSIGNEE(S): (CNDR) CONSIGLIO NAZ DELLE RICERCHE
COUNTRY COUNT: 72
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9703697	A2	19970206	(199712)*	EN	20
RW: AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG					
W: AL AM AU AZ BB BG BR BY CA CN CZ EE GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LV MD MG MK MN MW MX NO NZ PL RO RU SD SG SI SK TJ TM TR TT UA UG US UZ VN					
AU 9667351	A	19970218	(199723)		
WO 9703697	A3	19970410	(199729)		
EP 839051	A1	19980506	(199822)	EN	
R: AT BE CH DE DK ES FR GB IE IT LI LU NL SE					
IT 1275571	B	19970806	(199825)		
US 6036941	A	20000314	(200020)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9703697	A2	WO 1996-EP3201	19960719
AU 9667351	A	AU 1996-67351	19960719
WO 9703697	A3	WO 1996-EP3201	19960719
EP 839051	A1	EP 1996-927559	19960719
		WO 1996-EP3201	19960719
IT 1275571	B	IT 1995-MI1560	19950719
US 6036941	A	WO 1996-EP3201	19960719
		US 1998-11347	19980511

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9667351	A Based on	WO 9703697
EP 839051	A1 Based on	WO 9703697
US 6036941	A Based on	WO 9703697

PRIORITY APPLN. INFO: IT 1995-MI1560 19950719

AN 1997-132381 [12] WPIDS

AB WO 9703697 A UPAB: 19970320

Fluorogenic substrates (FS), capable of fluorescence emission and photosensitisation activity on enzyme transformation, and suitable for diagnosis and photodynamic therapy of tumours, comprise fluorescent substances with high yield of photosensitisation activity, modified chemically by introducing a gp. which quenches these properties, but is removable by enzyme activity in the tumour cells, with restoration of the fluorescence and photosensitisation properties.

The FS consist of **Rose Bengal** acetate, phosphate, monobutyrate or dibutyrate; haematoporphyrin or protoporphyrin IX monoacetate, diacetate and phosphate; phthalocyanine monoacetate,

diacetate, and phosphate, or hypericin polyacetate or polyphosphate. The FS include derivs. of **xanthene**, porphyrins, phthalocyanines, chlorines or perylenequinonoid pigments. Quenching gps. include acetate, sulphate, phosphate, dibutyl ester, galactopyranoside, glucuronide or acetamido-deoxyglucopyranoside.

USE - The substrates are applied in all sectors of diagnosis and photodynamic therapy in oncology. Partic. reference is to tumours in cavities, in conjunction with fibre optic systems and endoscopy, and to topical tumours. Possible applications are in haematic pathologies and purging of bone marrow for autologous transplant. Systemic admin. is as an isotonic saline soln. or a liposome **suspension**. Topical admin. is from solns. favouring absorption and **penetration** of the FS, e.g., as a soln. in 50% i-PrOH contg. ca. 2% azone, a penetrant agent. Amts. are 1-10 mg/kg.

ADVANTAGE - The enzyme removing the quenching gp. in the FS is one expressed in greater quantity in the tumour cells, causing preferential accumulation of the active substance in tumour rather than healthy cells. This results in better distinction in outlining the tumour mass, and less damage to healthy cells.
Dwg.0/6

=> d kwic 7

L20 ANSWER 7 OF 7 WPIDS (C) 2003 THOMSON DERWENT
AB . . .

by enzyme activity in the tumour cells, with restoration of the fluorescence and photosensitisation properties.

The FS consist of **Rose Bengal** acetate, phosphate, monobutyrate or dibutyrate; haematoporphyrin or protoporphyrin IX monoacetate, diacetate and phosphate; phthalocyanine monoacetate, diacetate, and phosphate, or hypericin polyacetate or polyphosphate. The FS include derivs. of **xanthene**, porphyrins, phthalocyanines, chlorines or perylenequinonoid pigments. Quenching gps. include acetate, sulphate, phosphate, dibutyl ester, galactopyranoside, glucuronide or acetamido-deoxyglucopyranoside.

USE. . . pathologies and purging of bone marrow for autologous transplant. Systemic admin. is as an isotonic saline soln. or a liposome **suspension**. Topical admin. is from solns. favouring absorption and **penetration** of the FS, e.g., as a soln. in 50% i-PrOH contg. ca. 2% azone, a penetrant agent. Amts. are 1-10. . .

=> d his

(FILE 'HOME' ENTERED AT 16:11:54 ON 31 JAN 2003)

FILE 'CAPLUS, MEDLINE, BIOSIS' ENTERED AT 16:12:18 ON 31 JAN 2003

FILE 'CAPLUS, MEDLINE, BIOSIS, WPIDS' ENTERED AT 16:12:23 ON 31 JAN 2003

L1 20 FILE CAPLUS
L2 1 FILE MEDLINE
L3 7 FILE BIOSIS
L4 8 FILE WPIDS

TOTAL FOR ALL FILES

L5 36 S HALOGENATED XANTHENE
L6 249 FILE CAPLUS
L7 22 FILE MEDLINE
L8 51 FILE BIOSIS
L9 26 FILE WPIDS

TOTAL FOR ALL FILES

L10 348 S XANTHENE AND ROSE AND BENGAL

L11 24 FILE CAPLUS
L12 1 FILE MEDLINE
L13 2 FILE BIOSIS
L14 10 FILE WPIDS
TOTAL FOR ALL FILES
L15 37 S L10 AND (STABILIZERS OR EMULSIFIER OR DISPERS? OR PRESERVAT?
L16 3 FILE CAPLUS
L17 0 FILE MEDLINE
L18 0 FILE BIOSIS
L19 4 FILE WPIDS
TOTAL FOR ALL FILES
L20 7 S L15 AND (SUSPENSION OR CREAM OR OINTMENT OR GEL OR SYRUP OR T

=>